

Chapter 8 Preview

Systems of Equations and Inequalities
Integrated Math 2

Name _____

Date _____

Definitions: Define the following terms:

- | | |
|----------------------------------|-------------------|
| 1. Negative/opposite reciprocals | 5. Square matrix |
| 2. System of equations | 6. Determinant |
| 3. Solution of a system | 7. Cramer's Rule |
| 4. Substitution | 8. Directed Graph |

Objectives: You *should* be able to do the following objectives:

1. Determine if two lines are parallel or perpendicular
2. Write equations of parallel and perpendicular lines
3. Determine if an ordered pair is a solution of a system
4. Solve systems of linear equations graphically
5. Solve systems of equations using substitution
6. Solve systems of equations by adding or subtracting
7. Solve systems of equations by adding and multiplying
8. Find the determinant of a 2×2 matrix
9. Solve systems of equations using determinants (Cramer's Rule)
10. Use a picture, diagram, or model to represent a real-world problem
11. Write a system of linear inequalities for a given graph
12. Graph the solution set of a system of linear inequalities

Answer the following:

1. How do you know if lines are parallel, just by looking at their slopes?
2. How do you know if lines are perpendicular, just by looking at their slopes?
3. If you have a point and a slope, how do you find the equation of the line that goes through it?
4. How do you know whether a point is a solution to a system or not?
5. When you graph two lines, what is the solution to the system?
6. When combining equations, which variable do you eliminate first? How do you do it?
7. How do you find the determinant of a matrix?
8. How do you use determinants to solve a system of equations?
9. What is the solution to a system of inequalities?
10. How do you switch from a map of a directed graph to a matrix and back?

If you can give a good definition for each term without having to look it up, then you should be ready to identify these terms for the test and quizzes. If you can describe a method as to how to perform each of the objectives, then you should be ready to perform these tasks on the test and quizzes. If there are any terms or objectives that you are unsure about, then these are the things you want to take extra time studying.

Check the class wiki for wiki summary assignment.